Service Date: May 27, 1981

DEPARTMENT OF PUBLIC SERVICE REGULATION
MONTANA PUBLIC SERVICE COMMISSION

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In the Matter of the Application of	)	UTILITY DIVISION
PACIFIC POWER & LIGHT COMPANY,	)	DOCKET NO. 6728
for authority to establish increased	)	PHASE II
rates for electric service.	)	ORDER NO. 4667b

APPEARANCES

FOR THE APPLICANT:
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FOR THE PROTESTANT:
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FOR THE COMMISSION:
Eileen E Shore, Staff Attorney, 1227 Eleventh. Avenue, Helena, Montana 59620

BEFORE:
GEORGE TURMAN. Commissioner & Hearing Examiner
GORDON E. BOLLINGER, Chairman
CLYDE JARVIS, Commissioner
THOMAS J. SCHNEIDER, Commissioner

BACKGROUND

1. Pacific Power & Light Company (PP&L) is a public utility providing electric service to consumers in the northwest portion of the State of Montana.

2. On September 26, 1979, PP&L submitted an application for authority to adopt increased rates and charges for electric service initiating Docket No. 6728.

3. On November 6, 1979, the Commission directed all parties to the proceeding in Docket No. 6728 to address rate design issues and the ratemaking standards set forth in Sections 111 and 114 of

the Public Utility Regulatory Policies Act of 1978 (PURPA).

4. On February 13, 1980, the Commission bifurcated Docket No. 6728 into Phase I - revenue requirement, and-Phase II - rate design. A hearing on Phase I commenced on March 11, l980 and Order No. 4667 was issued on July 8, 1980. - Based on test year ending December 31, 1978, Order No. 4667 authorized PP&L to increase rates on a uniform cents per kilowatt-hour(4/kwh) basis, allowing PP&L increased annual revenues of $1,350,000 for its Montana electric service operations.

5. On June 26, 1981, the Montana Consumer Counsel advised the Commission that it would not be sponsoring rate design testimony in Docket No. 6728 In response, the Commission directed staff to retain expert witnesses to prepare and- present testimony in Phase II.

6. On November 18, 1980, a- hearing was held on Phase II at Kalispell, Montana. PP&L, the Commission's Adversary Staff, and several public witnesses provided testimony at the hearing.

7. The objectives of this proceeding were to a) examine PP&L's rate design and b) to consider ratemaking standards set forth by PURPA. The examination of PP&L's rate design encompasses the goals of PURPA which have been long-standing ratemaking objectives of the Commission prior to passage of the Act. These goals are a) the promotion of energy conservation, b) efficient management of energy resources, and c) equitable rates for consumers of electric service in Montana. The Commission's explicit consideration and determination of the appropriateness of implementing the PURPA ratemaking standards is provided in a latter portion of this Order. Following, are the Commission's findings in respect to PP&L's rate design, including cost of service, rate spread and structure, time-of-use pricing, and other rate design considerations.

FINDINGS OF FACT

Cost of Service

8. PP&L presented evidence as to the embedded or historical cost of service and the marginal, or future cost of service

9. Mr. David W. Sloan, the Company's rate processing and administration manager, testified that there are some who urge that the relevant costs to be considered for ratemaking should be fully embedded allocated costs and others who advocate that the more relevant costs are nTarg~na1 or long-run incremental costs (LRIC) Embedded costs reflect cost relationships of plant and expenses the Company incurred or committed itself to in the past In contrast, marginal or LRIC studies reflect the cost of new plant and associated expenditures, in today's dollars, to which the utility is committing itself to meet future needs. Mr. Sloan testified that LRIC is the best reflection of the anticipated increases in expenses caused by future generation. He concluded that LRIC provides a better signal to electric consumers as to the factors impacting the Company and its customers.

10. Dr. Dennis Peseau, an economist, who testified for the Commission Staff, also supported the use of LRIC to establish rates and fulfill PURPA requirements. Dr. Peseau testified that electric costs are expected to increase. He concluded that marginal cost pricing provided an economically rational method of setting energy rates.

11. The Commission agrees with the parties that LRIC represents the true economic costs imposed on PP&L by the various classes of electric; consumers and gives the best possible price signal to consumers as to the costs of their consumption of electricity; as such it is the relevant cost to be used in designing utility rates.

12. Although the Company and staff witnesses agreed that PP&L's marginal costs should be computed, they disagreed as to the method that should be used to calculate such costs.

13. Mr. Robert V. Sirvaitis, the Company's cost of service supervisor in the rate department, presented a proposed form of computing LRIC. Mr. Sirvaitis separated costs into three major groups, generation, transmission and distribution. The costs within such groups were then classified by service characteristics and apportioned to customer load classes based on each customer class's estimated contribution to the cost incurrence. To determine the generation-related LRIC, the Company developed revenue requirements associated with incremental generation resources, expressed in 1978 dollars. To determine. the costs of peaking generation resources, the alternatives of a combustion turbine and a pumped storage project were examined. The revenue requirements for incremental transmission investment were developed on the basis of transmission associated with planned generation projects and transmission associated with regular system transmission additions. Incremental distribution investment and associated expenses by load classes were determined by making a detailed analysis of actual distribution expenditures. In addition, billing costs were developed as a separate category to determine the revenue requirement associate with metering, meter-related operating and maintenance expense, and customer accounting and informational expense. The Company's method is similar to that used in its Oregon rate proceedings and has been generally accepted by the staffs of the Washington Utilities and Transportation Commission and the California Public Utilities Commission.

14. The staff proposed a different method of computing LRIC. Dr. Peseau stated that a simple determination of the Company's marginal costs was not available due to uncertainties as to relevant matters. To estimate the marginal generation cost, Dr. Peseau used a detailed system planning model developed by his employer, Zinder Companies, Inc., based on linear programming techniques. The results developed by Dr. Peseau's use of the model are not significantly- different from those developed by PP&L,. In rebuttal, Mr. John Shue, PP&L's development and

research manager in the rate department, testified that the estimates developed by Dr. Peseau do not significantly differ from those estimated by the Company. Mr. Shue stated that Dr Peseau's costs were based on 1930 dollars as compared with PP&L's 1978 dollar basis. He stated that given a consistent method of using the cost estimates, the results were nearly identical. Mr. Shue testified that PP&L's cost study, which was specifically designed to mirror the Company's generation planning, was easily understood and audited. He also noted that PP&L began working in November, 1979 to develop a comprehensive generation expansion planning model.

15. Mr. Sloan also testified in response to Dr. Peseau's computation of LRIC. He stated that rates, based upon either PP&L's determination of LRIC or staff's determination of LRIC produce approximately the same results for each customer class when spreading rates to recover the Company's authorized revenues.

16. The Commission- concludes that although the Zinder method is conceptually superior, for practical purposes in this proceeding, and since the resulting revenue spreads are virtually identical, the proper approach is to utilize PP&L's LRIC analysis. This will provide consistency with PP&L's proceedings in other jurisdictions and will permit the calculation of LRIC-based rates for all customer classes in addition to the residential and commercial classes. In future rate proceedings, PP&L is encouraged to bring before the Commission for consideration its proposed advanced model.

17. The Commission concludes that use of LRIC pricing is consistent with the economic efficiency criterion. Further, the Commission finds that LRIC when applied properly, to the maximum extent practicable, (1) permits identification of differences in cost-incurrence for each customer class attributable to daily and seasonal time of use;. (2) permits identification of differences

in cost-incurrence attributable to customer demand and' energy components of cost; (3) permits a determination of the change in total cost if additional capacity is added to meet peak demand relative to base demand or if additional kilowatt-hours of electric energy are delivered to consumers.

Rate Spread and Structure

18. As the cost of electricity is expected to increase in the future, the full long-run incremental cost of electricity may not be used to establish the Company's revenue requirement as it exceeds the Company's present revenue requirement based on embedded costs. Witnesses for the Company and the staff testified that a method must be found to spread the revenue requirement among the Company's customer classes in such manner as to recognize the gap between historical costs and estimated LRIC. Mr. Sloan established that for the major customer classes, LRIC exceeded embedded costs by $20,697,000. Mr. Sloan stated that as the Company proposed to increase the revenue level by $1,566,000, the difference between LRIC and present revenues would be reduced by 7.57 percent ($1,566,000 divided by $20,697,000). Mr. Sloan suggested that the difference between present rates and LRIC, for each class, should be reduced at the uniform rate of 7.57 percent. Mr. Sloan testified that his method would avoid disproportionate rate increases to customer classes, would treat each customer class in a uniform manner, and would allow the Commission in future rate cases to progressively move rate levels for each class into line with their incremental costs while maintaining a predictable continuity.

19. Dr. Peseau testified that the most frequently discussed methods of reducing the gap between marginal costs and embedded costs included: (1) setting rates equal to full marg~na1 costs; (2) use of the inverse elasticity rule; (3) spreading revenue on the basis of embedded costs, (4) lifeline rates for small consumption blocks; and (5) having each class pay an equal

proportion of its marginal costs. Dr. Peseau recommended that each class contribute an equal percentage of its marginal costs and further testified that if the Commission utilized his recommendation, it must determine how quickly to realize its goal.

20. Under cross-examination, Mr. Shue and Dr. Peseau agreed that the difference between allowable revenues and full LRIC revenues represents a form of-;economic rent, and that there are no economic arguments suggesting the proper approach to distributing that rent. Mr. Shue testified that PP&L believed it to be equitable to spread the rents back proportionally to the various customer classes. He agreed that returning the rents, via average cost pricing, to customers proportionally to consumption destroys the impact of LRIC price signals. Dr. Peseau also stated that he could not see how it would be judged equitable for one class to pay a higher percentage of marginal costs to reduce the costs to another class below that percentage.

21. The Commission concludes that PP&L shall establish class revenue responsibility in such a manner that each class pays an equal percentage of LRIC. This pricing structure establishes a basis for rates more reflective of actual market conditions. Furthermore, PP&L shall accomplish ,his adjustment completely, subject to the constraint that no class shall be subject to increases in revenue responsibility of greater than 100 percent.

22. Given the establishment of inter-class revenue responsibility, the issue of economic rent becomes a matter of structuring intra-class rate schedules. This entails an examination of basic, energy, and demand rates.

23. PP&L proposes to adopt basic charges which reflect customer and distribution-related costs for all schedules. They propose a flat energy rate for Residential Schedule 7 and propose to eliminate General Service Schedule 31, placing customers with greater than 1,000 kw demand into a new

Schedule 48T with the remaining customers lumped into the existing Schedule 22. Mr. Sloan proposes a demand charge to demand metered Schedule 22 customers for demands greater than 15 kw. Furthermore, he proposes a declining block energy charge structured to reflect generation and transmission-related costs incurred by nondemand metered customers. In Schedule 48T, the Company proposes flat energy charges.

24. Mr. Sloan argues that the basic charges are reflective of rates based on costs and therefore, should be incorporated into the pricing of electric service. In regard to the declining energy charge in Schedule 22, PP&L argues that it is necessary in order to make the transition between nondemand metered and demand metered customers. Mr. Shue testified that to correctly reflect the costs of service to very small general service customers for whom it is not economical to install demand meters, demand charges must be levied in an initial block of energy rates.

25. Mr. Wallace Gibson, a senior economist with Zinder, testified that it is reasonable that energy blocks decline to the extent justified by demand and energy costs of nondemand metered customers or to reflect a reasonable matching of nondemand metered schedules with demand metered schedules for customers of similar load size.

26. The Commission finds problems with the proposed basic charges for all schedules as well as the proposed declining block energy charge in Schedule 22. The major component in rising LRIC relative to embedded costs is the cost of new baseload generation. The Commission fails to see the merit in pricing energy approximately 60 percent below its accepted costs yet levy a charge to recoup customer costs and offer an energy rate which conveys to the consumer that the system is characterized by declining costs.

27. The Commission in this proceeding has accepted LRIC as the

proper cost basis for developing rates. In light of this, the Commission rejects Mr. Sloan's contention that basic charges are justified in order to reflect cost of service. In a strict application of the inverse elasticity rule, the Commission hereby directs PP&L to structure rate schedules which eliminate basic charges for all classes of customers. Furthermore, the Commission rejects the Company's proposal to implement declining block rates for energy consumption by small General Service customers by means of an initial block recovery of unmetered demand charges. The Commission established a policy in Order No. 463oc (In the Matter of the Application of Montana-Dakota Utilities Company for Authority to Establish Increased Rates for Electric Service) of encouraging nondeclining energy rates for such customers and finds no reason to deviate from that policy in this Order. Regardless of the intent to recover unmetered demand costs in the initial block, the effect of such a rate structure is to convey incorrect declining energy cost information to users of electricity.

28. The Commission encourages PP&L, in future rate proceedings, to submit a proposal to establish separate rate schedules for demand metered and nondemand metered small general service customers with separate nondeclining energy rates for each schedule.

29. Having now rejected basic charges and declining energy rates, the Commission wishes now to turn to the subject of inverted rates When applied to residential energy charges, inverted rates are commonly referred to as a lifeline structure the provision of essential residential needs at rate below nonessential needs; when applied to commercial schedules, then they are referred to simply as inverted rates.

30. PP&L believes that lifeline rates should not be adopted by the Commission. Mr. Shue testified that such rates should not be adopted unless they can be based on a documented customer need

which cannot be expected to be met in a more efficient manner. Mr. Shue addressed the issues of whether lifeline rates assist persons who cannot afford the rising price of electricity and whether they promote conservation any better than current rates. Mr. Shue stated there is a very weak relationship between income and electric consumption. He testified that based on a survey of the Company's Oregon residential customers, who are similar to the Company's Montana customers, over 90 percent of the variation in consumption levels between customers ;`as not associated with income. Low income customers whose electric bills are larger than average have been hard hit by electric price increases and they will be hurt by lifeline rates. Mr. Shue also testified that there does not seem to be any evidence to support the claim that lifeline rates give some customers more incentive to conserve. He noted that even if some customers conserve, other customers receive an equivalent bill reduction because of the inverted rate and, therefore, have an offsetting incentive to slacken tl2eir conservation. Mr. Shue testified that he was not aware of any empirical studies showing that households are more influenced by the marginal kwh electric rate than by the average rate or total bill. He testified that experience with lifeline rates in the Company's California service territory as contrasted with its adjacent southern Oregon service territory, where such rates did not apply, did not support a conservative. effect from lifeline rates.

31. Dr. Peseau testified that the overriding objective of most lifeline proposals is income distribution and not economic efficiency. He stated that if a lifeline proposal attempts to price higher usage blocks at or near marginal costs, other blocks would have rates below embedded costs. He
stated that the most telling criticism of this method was its presumed knowledge of intra-block price elasticities.

32. Mr. Walter Cavagnaro, a member of the California Public Utilities Commission Planning and Policy Division, testified for staff in favor of lifeline. He testified that to the extent a

residential customer purchases energy above lifeline quantities at an inverted rate, conservation will be more cost effective from the customer's point of view. Mr. Cavagnaro testified that the California Commission, pursuant to legislative mandate, established a lifeline block, initially, of 300 kwh per month for residential customers and that this Commission should very seriously consider such a rate.

33. Ms. Susan Kohler Hurd, representing Northwest Montana Human Resources, appeared on behalf of low income ratepayers. She testified that many low income people live in poorly insulated housing heated Wit}1 electricity. She testified that in addition to the problems caused by poor insulation, elderly people, to maintain adequate body temperatures, must keep their homes heated to 70 degrees or more. She testified that creation of a lifeline rate, with a sharply inverted rate block above the lifeline level, would place a burden on the elderly and the poor who use electric heat.

34. The Commission notes the considerable interest, bot-h pro and con, in lifeline rate structures for the purpose Or providing relief for low income consumers and is cognizant of the hardships imposed on them by rising average costs. Although the Commission does not find a sufficient basis on
the record to justify lifeline rates on these grounds, it rejects Mr. Shue's and Dr. Peseau's contention that the primary objective of inverted lifeline like rates is income distribution.

35. Under cross-examination, Mr. Sloan, Mr. Shue and Dr. Peseau agreed that LRIC represent the economic costs imposed on PP&L by consumers demands for electricity with respect to the need for additional generation capacity. Mr. Shue testified that if LRIC were fully reflected in rates, consumers would have significantly greater incentive to utilize electricity efficiently. The resulting reduction in load growth would lead to a decrease in the need for additional capacity and a decrease in long-run revenue requirements.

36. Dr. Peseau testified under examination, that an inverted rate structure in which the tail block reflected LRIC as calculated with a lower initial block could preserve the revenue requirement while coming close to meeting the criterion of economic efficiency. He stated that if loads were not growing then LRIC would be represented by the operating costs of existing capacity, which is much lower than energy costs associated with new facilities.

37. The Commission finds problems with the fact that energy consumers, in rationally deciding between the consumption of electricity and other substitute goods such as insulation, are given err erroneous price signal resulting in the inefficient utilization of resources and, eventually unnecessarily higher prices to all consumers. The Commission concludes that an inverted Residential Schedule 7 is justified on efficiency grounds. B: holding an initial block at lower levels, the tail block rate may more closely reflect LRIC, thus promoting the efficient utilization of energy resources. Regarding the presumed knowledge of intra-block elasticities, the Commission challenges PP&L and Dr. Peseau to reveal any evidence indicating the existence of the illogical condition where an initial block of residential consumption is not less elastic than higher blocks. It is only if one were to assume that illogical condition that an inverted residential schedule would not result in an increased level of efficient conservation of energy resources.

38. The Commission directs PP&L to design a residential rate featuring an initial block of 300 kwh per month, to be froze at the rate prevailing prior to these proceedings, 1.9114/kwh. Consumption above 300 kwh per month is to be charged at a rate which leads to the recovery from the residential class of an equal proportion of class LRIC revenues to that collected from the other classes. In adopting this inverted rate structure, the Commission is establishing a policy based on LRIC ratemaking philosophy. The Commission directs PP&L to prepare testimony for

the next rate relief request on the subject of the desirable size of the initial block and on the desirable rate for the initial block.

39. While efficiency criterion can be used to extend LRIC based inverted rates to General Service customers, the Commission declines at this time to do so. The Commission wishes it to be known, that it very seriously considered inverting both General Service schedules, but declined due to the lack of evidence revealing class billing characteristics. PP&L is directed to prepare testimony for the next rate case on the advantages and disadvantages of inverted rates for Schedule 22 and 48T.

Time-of-Use Rates

40. Testimony provided by Mr. Sirvaitis indicates that PP&L's LRIC varies significantly by season. For residential customers, winter LRIC is 7. 474/kwh versus 5. 784/kwh in the summer, a differential of 29 percent. Mr. Sloan proposes a residential winter energy charge which is 10 percent higher than the summer charge.

41. For General Service Schedule 22 applicable to all commercial loads of less than 1,000 kw, the overall LRIC in the winter is 7.224/kwh; summer LRIC is 5.164/kwh, a differential of 40 percent. For demand-related costs alone the differential is much greater. Winter demand-related LRIC is $10.52/kw, taking a weighted average of the size classes; in the summer the equivalent figure is $3.42/kw. This is a 208 percent differential. Mr. Sloan proposes a modest 50 percent seasonal differential in demand charges and a 10 percent differential in initial energy block of less than 3,000 kwh.

42. For large commercial customers of greater than 1,000 kw, Mr. Sloan proposes, in the proposed metered time of-use Schedule 48T a 50 percent seasonal differential in demand charges during-peak

hours with no charge during nonpeak hours. When adjusting for peak losses, the demand related LRIC is $8.99/kw per month in the winter and $.81/kw in the summer, a 1010 percent differential. 43 Mr. Shue testified that the Company strongly favors rates reflecting time-related variations in costs to ≅he extent they are significant and relatively permanent. He stated that if special metering is required, the added expenditures should be undertaken if they are clearly cost justified by resulting savings He noted that although this type of pricing might save substantial amounts of oil and resources in other regions, at least initially, time-of-day pricing and load management will have rather limited usefulness for the Company and other Northwest utilities due to unique load and resource mixes. He stated that PP&L's current load variation is approximately as narrow as has been achieved by rate design in Europe. He explained that the Company's peak period loads have high daily load factors because they are caused by extremes in weather and their impact on electric heating load. Mr. Shue concluded that during peak days there is plainly no large off-peak trough into which peak hour loads may be shifted Mr. Shue calculated that based on PP&L's total LRIC, if peak day loads were completely flat, there would be a 3 percent savings in total incremental costs prior to giving effect to the cost of time-of-day pricing and load management equipment required to accomplish this result. Based on Mr. Shue's testimony, Mr. Sloan testified that loads of 1,000 kw and over should be served on a time-of-day rate schedule. In order to avoid a revenue deficiency, Mr. Sloan recommended that the revenue requirement for large general service customers on time-of-day rates be increased by an amount consistent with 5 percent shift in on-peak demand to off-peak demand This would have the effect of increasing the re-venue level for the Time-of-Day Schedule 48T customer class by 0.9 percent annually. The evidence also established that the cost of a time-of-day meter for a customer between the 300 and 700 kw demand range would be approximately $1,OOO per customer.

44. The Commission concludes that a 10 percent seasonal

differential in the residential tail block is an appropriate first step towards reflecting the full seasonal differential in LRIC. The Commission further finds that a similar 10 percent seasonal differential in a flat energy rate in Schedule 22 would be an appropriate indicator to nondemand metered customers and that where general service customers are demand metered, the 50 percent seasonal differential in demand charges is an appropriate first step towards reflecting the full seasonal differential in demand-related LRIC to such customers.

45. As for the proposed Schedule 48T, the Commission finds that the proposed 50 percent differential in demand charges is appropriate. However, the Commission is hesitant in accepting the proposed time-of-day differential. The record does not reveal a careful examination of the potential for resulting "needle peaks" and/or base load growth resulting from the potentially promotional aspects of the proposed p~ icing of off-peak demand. In light of the limited cost incurred in metering the few large commercial customers applicable, and the lack of information indicating adverse effects, the Commission hereby accepts Mr. Sloan's time-of-day pricing proposal on an experimental basis. Further, the Commission directs PP&L to investigate and document the effects on load resulting from the time-of-day pricing and to present the results of such investigation to the Commission in the next rate case proceeding before the Commission

46. The Commission soundly rejects the Company's request for a .9 percent test year revenue increase associated with the time-of-day pricing proposal. The Commission finds no evidence of record indicating a basis, either qualitative or quantitative, for the contention that load shifts from peak to off-peak hours would result in a .9 percent revenue deficiency.

Interruptible Rates and Load Management

47. Mr. Shue testified that interruptible rates are appropriate

if based on responses to a survey of the Company's large customers. Mr. Shue testified that PP&L has historically had little reason to consider interruptible rates as the region had a peak surplus. Although there are no present firm plans to construct peaking facilities, there will be peak deficits in the future. He concluded that the design of an appropriate interruptible rate will be difficult and will require exploration of new areas. Mr. Shue suggested that such rates reflect actual cost avoidance achieved by the Company due to such rates.
Mr. Gibson agreed with Mr. Shue. He testified that benefits of an interruptible rate should be based on marginal costs saved by the utility. He expressed some doubt that a customer would sign up for an interruptible energy rate.

48. The Commission finds merit in interruptible rates and encourages the Company to investigate the potential benefits of offering such rates to its large industrial customers.
49. Although load management was conditionally endorsed by both Mr. Shue and Dr. Peseau, no evidence was entered in the record which indicates the-economic rationality of any particular techniques.

50 . The Commission strongly urges PP&L to continually monitor and investigate the potential benefits of load management. In the case of PP&L, the relevance of 1oad shifting techniques is much less than that of load reducing techniques, including conservation equipment As revealed in previous findings in this Order, the Commission is especially concerned with residential space heating loads.

Partial Requirements Service

51. Mr. Sloan sponsored exhibits containing proposed Schedules 5, 33 and 47T, which provide conditions and rates for sale and purchase of power to, on a partial basis, and from cogenerators and small power producers. The Commission rejects the proposed

schedules. The matter of concern in these schedules, the conditions and rates for sale and purchase are the subject of generic Docket No. 81.2.15, "In the Matter of Avoided Cost Based Rates for Public Utility Purchases from Qualifying Cogenerators and Small Power Producers."

PUBLIC UTILITY REGULATORY POLICIES ACT (PURPA)

52. Sections 111 and 114 of PURPA requires the Commission to explicitly judge the merits of implementing six "ratemaking standards" and lifeline rate structure. This section of the Order presents the Commission's consideration and ensuing action with respect to PURPA, per se. The standards are provided below, as they appear in the Act

SEC. 111 Consideration and Determination Respecting Certain Rating Standards.

* * *

(1) COST OF SERVICE . -- Rates charged by any electric utility for providing electric service to each class of electric consumers shall be designed, to the maximum extent practicable, to reflect the costs of providing electric service to such class,

(2) DECLINING BLOCK RATES. -- The energy component of a rate, or the amount attributable to the energy component in a rate, charged by any electric utility for providing electric service during any period to any class of electric consumers may not decrease as kilo-watt-hour consumption by such class increases during such period except to the extent that such utility demonstrates that the costs to such utility of providing electric service to such class, which costs are attributable to such energy component, decrease as such consumption increases during such period.

(3) TIME-OF-DAY RATES. -- The rates charge by any electric utility for providing electric service to

each class of electric consumers shall be on a time-of day basis which reflects the costs of providing electric service to such class of electric consumers at different times of the day unless such rates are not cost-effective with respect to such class,

(4) SEASONAL RATES. -- The rates charged by an electric utility for providing electric service to each class of electric consumers shall be on a seasonal basis which reflects the costs of providing service to such class of consumers at different seasons of the year to the extent that such costs vary seasonally for such utility.

(5) INTERRUPTIBLE RATES. -- Each electric utility shall offer each industrial and commercial electric consumer an interruptible rate which reflects the cost of providing interruptible service to the class of which such consumer is a member.

(6) LOAD MANAGEMENT TECHNIQUES . -- Each electric utility shall offer to its electric consumers such load management techniques as the State regulatory authority. . . has determined will - (A) be practicable and cost-effective, as determined under section 115(c),

(B) be reliable, and

(C) provide useful energy or capacity management advantages to the electric utility.

SEC. 114. LIFELINE RATES.

(a) LOVER RATES. -- No provision of this title prohibits a State regulatory- authority (with respect to an electric utility for which it has ratemaking authority) or a nonregulated electric utility from filing, approving, or allowing to go into effect a rate for essential needs (as defined by the State regulatory authority or by the nonregulated electric utility, as the case may be) of residential electric consumers which is lower than a rate under the standard referred to i~ section 111(d)(1).

(b) DETERMINATION -- If any State regulated

electric utility or nonregulated electric utility does not have a lower rate as described in subsection (a) in effect two years after the date of the enactment of this Act, the State regulatory author) by having ratemaking authority with respect to such State regulated electric utility or the nonregulated electric utility, as the case may be, shall determine, after an evidentiary hearing, whether such a rate should be implemented by such utility.

53. In this proceeding, the Commission has considered these rate design issues. Provided below are the Commission's findings in regard to each standard.

54 Cost of Service. All of the parties to the proceeding in this Docket promote the adoption of cost based rates. The Commission accepts long-run incremental costs, differentiated by time, function and customer class, as a basis in developing rate structure. To the maximum extent practicable, the Commission has designed rates which reflect these costs. The Cost of Service standard is hereby adopted and implemented, constrained by practicability in the form of other Commission ratemaking objectives .

55. Declining Block Rates. The Commission has both adopted and implemented the Declining Block Rates standard, in that the energy component of energy charges existing prior to this Order were flat and, as a result of this Order will remain flat or, in the case of the Residential Schedule 7, will be inverted PP&L's proposal to establish a declining energy charge for General Service Schedule 22 to recover unmetered demand costs was rejected by the Commission.

56. Time-of-Day Rates. All parties to the proceeding also support the cost-effective implementation of rates which vary by time-of-day. In the case that? to the satisfaction of the Commission, it

is demonstrated that the implementation of time of day rates result in net- social benefits, then the Commission intends to implement rates which vary by time-of-day. The long-run incremental costs accepted by the Commission indicate an insignificant variation in energy costs by time-of-day. Therefore, the Commission finds no benefit in implementing time-of-day energy charges for PP&L's electric service in Montana. However, the incremental costs indicate a substantial divergence in daily demand costs and therefore, the Commission, on an experimental basis only, accepts PP&L's proposed time-of-day pricing for large customers of greater than 1,000 kw. The Commission wishes to qualify its adoption and limited implementation of this standard, in that it intends to further examine the appropriateness of this pricing mechanism with respect to possible occurrence of needle peaks and base load growth resulting from the potentially promotional aspects of the standard.

57. Seasonal Rates. Whereas energy costs were found to vary insignificantly by time, the long-run incremental costs accepted by the Commission indicate a substantial seasonal divergence in demand costs. The Commission, in accepting PP&L's proposed seasonal differential in pricing the demand component of energy charges for nondemand metered customers and demand charges for metered customers, hereby adopts and implements the Seasonal Rates Standard.

58. Interruptible Rates. The Commission adopts the standard; however, the record in Docket No. 6728 does not provide the Commission with sufficient evidence to judge the merits associated with interruptible rates in respect to PP&L's system. Although the Commission finds interruptible rates based on interruptible cost of service a desirable goal, it withholds implementation of the standard until such time the record identifies the relative costs and benefits of implementing the standard.

59. Load Management Techniques. Although all parties to the proceeding conditionally support Load Management Techniques, the record does not reveal any techniques which generate net social benefit the Commission finds the standard meritorious and intends to continually monitor evidence identifying the level of cost-effectiveness associated with any such technique.

60. Lifeline Rates. Section 114(b) of PURPA requires the Commission to examine the merits of providing a block of electricity consumption representative of essential needs at a price below cost. The Commission, in freezing an initial block of 300 kwh of the residential schedule at 1.911?/ kwh, in effect, is establishing a lifeline rate structure. However, the Commission has problems with this interpretation. First of all, in accepting long-run incremental costs constrained by authorized revenue levels, the Commission is providing for all electric service below costs. Secondly, as clearly stated in previous findings of fact, the paramount objective in freezing the initial block, as in eliminating service charges for all customer classes, is establishing a tail block rate which more pearl:' reflects the reality of today's energy market. The fact that the inversion provides for essential residential needs priced below "nonessential" needs is merely a residual (but not necessarily undesirable) effect of applying the inverse elasticity rule.

CONCLUSIONS OF LAW

1. The Applicant, Pacific Power and Light Company, is a "public utility's within the meaning of Montana law, Section 69-3-101, MCA

2. The Commission properly exercises jurisdiction over the Applicant's rates and operations pursuant to Section 69-3-102 and 69-3-302, MCA.

3. Based upon its consideration of the evidence and testimony presented by both the Applicant and the Commission Adversary Staff concerning each of the Section 111 PURPA standards and the Section, 114(a) lifeline standard; the Commission has adequately reviewed those standards in compliance with PURPA requirements.

4. Rates resulting from the rate structure outlined and adopted in the Findings of Fact are just and reasonable.

ORDER

1. PP&L shall design rates to generate authorized revenues which are consistent with the Findings of Fact entered by the Commission in this Order. These rates shall be designed as summarized below.

(a) Utilizing PP&L's long-run incremental cost analysis, establish, for all classes of customers, class revenue responsibility based on an equal percent of class incremental costs, except that for all schedules, class revenue responsibility shall not increase by greater than 100 percent as a result solely of this provision.

b) Eliminate, for all classes of customers, all nonusage sensitive basic, service, or customer charges.

c) Structure all energy charges, including Schedule 22, such that the charge per kwh remains constant at all levels of consumption, except that the first 300 kwh of monthly Schedule 7 consumption shall be priced at 1.9114/kwh.

d) Provide a 10 percent seasonal differential, as proposed, for energy charges in Schedules 7 and 22, for all levels of consumption ~n Schedule 22 and for levels greater than 300 kwh in Schedule 7.

e) Provide, as-proposed, a 50 percent seasonal differential in demand charges in Schedules 22 and 48T including the proposed time-of-day pricing in Schedule 48T on an experimental basis.

2. In submitting tariffs in compliance with this Order, PP&L shall also submit working papers revealing, in detail, the structuring of the rates.

3. In its next general application for authority to adopt increased rates, PP&L shall provide testimony addressing the following rate design issues:

a) long-run incremental costs resulting from PP&L's second generation advanced modeling,

b) seasonal differentials more nearly reflecting those costs,

c) if documented, effects on load of the time-of-day industrial demand charges resulting from this Order.

d) load management, particularly in respect to residential space heating loads, and

e) inverted general service schedules, including detailed bill frequency data, customer versus account billing, restructuring of general service classes, and. any other matters relevant in considering an inversion.

Done and Dated this 26th day of May, 1981

BY ORDER OF THE MONTANA PUBIC SERVICE COMMISSION.

Gordon Bollinger, Chairman

Thomas J. Schneider, Commissioner

Clyde Jarvis Commissioner

ATTEST

Madeline L. Cottrill
Secretary

(SEAL);

NOTE: You may be entitled to judicial review of the final decision in this matter. If no Motion for Reconsideration is filed, judicial review may be obtained by filing a petition for review within thirty (30) days from the service of this order. If a Motion for Reconsideration is filed, a Commission order is final for purpose of appeal upon the entry of a ruling on that motion, or upon the passage of ten (103 days following the filing of that motion. cf the Montana Administrative Procedure Act, esp Sec. 2-4-702, MCA; and Commission Rules of Practice and Procedure, esp . 38.2.4806.ARM